

FINAL BIOLOGICAL OPINION
FOR THE UPPER MISSISSIPPI RIVER-ILLINOIS
WATERWAY SYSTEM NAVIGATION
FEASIBILITY STUDY

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SUMMARY OF FINDINGS

In this Biological Opinion, the US Fish and Wildlife Service (Service) has determined that implementation of the recommended plan (project) described in the Draft Integrated Feasibility Report and Programmatic Environmental Impact Statement (EIS) for the Upper Mississippi River-Illinois Waterway System Navigation Feasibility Study, dated April 29, 2004, will not jeopardize the continued existence of the Indiana bat (*Myotis sodalis*), decurrent false aster (*Boltonia decurrens*), pallid sturgeon (*Scaphirynchus albus*) and Higgins eye pearl mussel (*Lampsilis higginsii*), but will result in incidental take of these species. Because it is a plant, take of decurrent false aster is not prohibited. However, Federal regulations prohibit any commercial activity involving this species or the destruction, malicious damage or removal of this species from Federal land or any other lands in knowing violation of State law or regulation.

By letter dated May 28, 2004 the Service concurred with the Biological Assessment findings that the project is not likely to adversely affect the bald eagle (*Haliaeetus leucocephalus*), interior least tern (*Sterna antillarum*), or winged mapleleaf (*Quadrula fragosa*), because project impacts either will be offset by management actions proposed by the Corps, or will be negligible.

The subject Feasibility Report states that the overall goal of the project is articulated in a vision statement defined by Upper Mississippi River System (UMRS) stakeholders: "To seek long-term sustainability of the economic uses and ecological integrity of the Upper Mississippi River System". To support that goal, four additional ecosystem-specific goals were adopted: 1) maintain viable populations of native species in situ, 2) represent all native ecosystem types across their natural range of variation, 3) restore and maintain evolutionary and ecological processes, and 4) integrate human use and occupancy within these constraints. This consultation was conducted by an interagency team which recognized that actions to achieve these goals will alternately favor and disfavor the species subject to this consultation, resulting in take where noted, but that the recommended plan should in the long term contribute to improved ecological integrity of the UMRS.

The Service considered including the spectacle case (*Cumberlandia monodonta*) and sheepsnose mussel (*Plethobasus cyphus*), which are candidate species, in this biological opinion. However, because there is no listing proposal at this time, they were not included in this opinion. When they are proposed for listing, the Service will enter into formal conference with the Corps, as appropriate.

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BACKGROUND

This programmatic (Tier I) consultation considers the systemic impacts of implementing the recommended plan (project) described in the Draft Integrated Feasibility Report and Programmatic EIS for the Upper Mississippi River-Illinois Waterway System Navigation Feasibility Study, dated April 29, 2004 (USACE 2004a), on listed species as projected over a 50 year period of analysis. This consultation follows the Final Biological Opinion for the Operation and Maintenance of the 9-Foot Navigation Channel on the Upper Mississippi River System (O&M BO), prepared for Tier I consultation on the effects of operating and maintaining the existing navigation system. Operation and maintenance of the navigation system includes impoundment, water level regulation, dredging and disposal, clearing and snagging, channel [regulating] structures and revetment, tow traffic, fleeting, port facilities, exotic species, contaminants, recreation, cabin leases; and General Plan Lands management.

This consultation utilizes a tiered consultation framework with the consultation resulting in a Tier I biological opinion. All subsequent projects will be Tier II consultations with Tier II biological opinions issued as appropriate (i.e., whenever the proposed project will result in unavoidable adverse effects to threatened and endangered species). The Tier I Biological Assessment (BA) (USCAE 2004b) and Biological Opinion (BO) evaluate the effects to listed species at the program or ecosystem level, and are intended to clarify any effects that may be insignificant at the site-specific level, but in totality may be substantial, rise to the level of incidental take, or result in jeopardy or adverse modification of critical habitat. Specifically, the Tier I consultation 1) evaluates how the goals of the project will alter current environmental conditions during and following completion of the project and how these anticipated changes in environmental conditions will affect threatened and endangered species occurring within the action area and 2) assesses whether the future site-specific actions that are required to meet the project goals will have the potential to adversely affect individuals within the action area. The Tier II consultations will evaluate the specific effects that are likely to occur when a future action is proposed.

To ensure that the exemption of incidental take is appropriately documented, the Corps of Engineers (Corps) and the Service will implement a tiered programmatic consultation approach. As individual projects are proposed under the recommended plan, the Corps shall provide project-specific information to the Service that 1) describes the proposed action and the specific area to be affected, 2) identifies the species that may be affected, 3) describes the manner in which the proposed action may affect listed species, and the anticipated effects, 4) specifies whether the anticipated effects from the proposed project are similar to those anticipated in the programmatic BO, 5) estimates a cumulative total of take that has occurred thus far under the tier I BO, and 6) describes any additional effects, if any, not considered in the tier I consultation.

The Service will review the information provided by the Corps for each proposed project. If it is determined during this review that a proposed project is not likely to adversely affect listed species, the Service will complete its documentation with a standard concurrence letter that refers to this BO, the tier I programmatic document (i.e., it “tiers” to it), and specifies that the Service concurs that the proposed project is not likely to adversely affect listed species or designated critical habitat. If it is determined that the proposed project is likely to adversely affect listed species or designated critical habitat, then the Service will complete a tier II BO with

a project-specific incidental take statement within the annual allotted programmatic incidental take.

This consultation was conducted by an interagency Corps of Engineers (Corps) – U.S. Fish and Wildlife Service (Service) Consultation Team composed of representatives of the three Corps Districts (St. Paul, Minnesota, Rock Island, Illinois, and St. Louis Missouri) and the three Service Ecological Services Field Offices on the Upper Mississippi River System (UMRS) (Twin Cities, Minnesota, Rock Island Illinois, and Marion, Illinois). The Team members cooperated with each other in exchanging information preparing and reviewing the BA and this BO. Each Team member took responsibility for one or more species covered in the consultation. Ultimate responsibility for the content of the Biological Assessment rests with the Corps, and the ultimate responsibility for the content of this BO rests with the Service.

The outline for the Biological Assessment was similar to that prepared for the first referenced consultation and was proposed by the Corps to ensure that all necessary topics would be addressed and that the need for additional information would be minimized following completion of the Assessment. The Corps developed an initial screening matrix in an attempt to identify all of the potential impacts to listed species for subsequent assessment.

Oversight of the consultation process was provided by the Service's Field Office Supervisors and the Corps District Office staff. Conflict resolution was the primary responsibility of the Field and District offices. A set of ground rules was jointly developed by the two agencies to guide the process.

SPECIES COVERED IN THIS CONSULTATION

This consultation covers the following species: bald eagle (*Haliaeetus leucocephalus*), interior least tern (*Sterna antillarum*), Indiana bat (*Myotis sodalis*), decurrent false aster (*Boltonia decurrens*), pallid sturgeon (*Scaphirynchus albus*), Higgins eye pearlymussel (*Lampsilis higginsii*), and winged mapleleaf mussel (*Quadrula fragosa*). During informal consultation, the Interagency Corps-Service Consultation Team concluded that the pink mucket pearlymussel (*Lampsilis abrupta*), scaleshell mussel (*Leptodea leptodon*), and fat pocketbook mussel (*Potamilis capax*) have been extirpated from the UMRS and need not be addressed. By letter dated May 28, 2004, the Service concurred with the Corps' findings in its Biological Assessment that the project may adversely affect the decurrent false aster and pallid sturgeon. However, the Service disagreed with the scope of adverse effects for the pallid sturgeon, and did not concur with the Corps that the project would not adversely affect the Indiana bat and Higgins eye pearlymussel.

The Service considered including the spectacle case (*Cumberlandia monodonta*) and sheepnose mussel (*Plethobasus cyphus*), which are candidate species, in this biological opinion. However, because there is no listing proposal at this time, they were not included in this opinion. When they are proposed for listing, the Service will enter into formal conference with the Corps.

CONSULTATION HISTORY

July 2, 2003- First meeting with Corps to discuss BA approach and anticipated schedule.

November 19, 2003 – Corps transmits draft impacts matrix example for discussion.

December 22, 2003 – Corps transmits Navigation Improvement Effects draft.

December 24, 2003 – Corps transmits Restoration Measures draft

December 24, 2003 – Service transmits email acknowledging receipt of preconsultation material, anticipated review period, and intra-agency distribution.

January 12, 2004 – Facsimile receipt of Corps request for species list

January 16, 2004 – Service provides species list facsimile to Corps. Advised Corps regarding schedule, and suggested team approach similar to that used for O&M BA.

January 16, 2004 – Corps-Service telephone conference call to discuss schedule request review completion date estimate and set meeting date.

February 11 and 12, 2004 – Meeting at Rock Island Field Office to discuss preliminary BA information and ground rules.

March 29, 2004 – Corps- Service meeting to discuss schedule, delivers first BA copy.

April 2, 2004 – Service offices receive BA.

April 22, 2004 – Service acknowledges receipt of the BA and provides start date of April 2

April 19, 2004 –Telephone conference with Corps and Service to discuss Not Likely to Adversely Affect and Likely to Adversely Affect determinations.

May 28, 2004 – Letter from Service outlining agreements and disagreements with BA determinations.

June 3, 2004 – Meeting with Corps at Twin Cities Field Office to discuss Service position on determinations, analysis status, and potential Reasonable and Prudent Measures (RPMs) and Terms and Conditions.

June 14 and June 17, 2004 - Service transmits preliminary draft sections of the BO for the pallid sturgeon to the Corps for review and comment.

July 1, 2004 – Service receives letter clarifying conservation measures proposed for Indiana bats. Ninety day consultation period ends.

July 2, 2004 - Service transmits preliminary draft sections of the Biological Opinion for the Higgins eye pearlymussel to the Corps for review and comment.

July 9, 2004 – Service transmits preliminary draft Project Description to the interagency team for review.

July 12, 2004 – Telephone conference between the Corps and Service

July 13, 2004 – Corps transmits comments on the project description and preliminary Biological Opinion sections.

July 19, 2004 – Corps –Service telephone conversation regarding acreage estimates for Indiana bats.

August 9, 2004 - Service receives letter clarifying conservation measures proposed for Indiana bats in response to additional interagency coordination.

August 12, 2004 – Draft Biological Opinion provided to the Corps for review and comment.

August 18, 2004 – Comments on Draft Biological Opinion received from Corps.

August 27, 2004 - Final Biological Opinion delivered to the Corps.